CO (Barkley). Erroneously reported from Albany Co., WY (Barkley) based on *Stephens 43631* (KANU), a collection of *P. lapathifolium* L. in early flower.

The Rocky Mountain Institute of Energy and Environment of the University of Wyoming provided financial support for much of the field work by Hartman, Nelson, and Dueholm.—Ronald L. Hartman, B. E. Nelson, and Keith H. Dueholm, Department of Botany, University of Wyoming, Laramie 82071 and Robert D. Dorn, Wyoming Department of Environmental Quality, Cheyenne 82002. (Received 5 Mar 1980; accepted 19 Jun 1980; final version received 7 Jul 1980.)

NOTES AND NEWS

Isozyme Variability in *Cortaderia selloana* and Isozyme Constancy in *C. jubata* (Poaceae).—*Cortaderia selloana* (Schult.) Asch. et Graebn. (pampas grass), a dioecious species, and *C. jubata* (Lem.) Stapf, an agamospermous one (Costas-Lippmann, Bot. Gaz. (Crawfordsville) 140:393–397. 1979) are the popular horticultural cortaderias in California. Both are native in South America. *Cortaderia selloana* is commonly seen in cultivation whereas *C. jubata* has escaped from ornamental plantings, becoming an aggressive weed in coastal California (Costas-Lippmann, Fremontia 4:25–27. 1977). and in New Zealand (Connor, New Zealand J. Bot. 3:17–23. 1965).

The fact that these two species are not easily distinguishable morphologically before flowering (Conert, Die Systematik und Anatomie der Arundineae. 1961; Costas-Lippmann, Ph.D. diss. Univ. Calif. Berkeley. 1976) raised the question of how much variability could be detected electrophoretically. Five enzyme systems (peroxidases, esterases, acid phosphatases, leucine-amino peptidases and amylases) were analyzed using standard techniques for starch electrophoresis.

Leaf material from the sheath close to the ligule was collected from plants of both species growing in cultivation in the research area of the University of California at Davis, and from naturally occurring populations in California. The plants at Davis were grown from seeds collected in natural populations in Argentina and Ecuador, and from naturalized populations in New Zealand.

California material of *Cortaderia selloana* was collected from Grizzly Island Road, Solano Co. (from two sites with different moisture conditions, close to the Montezuma Bridge) and Golden Gate Park, San Francisco Co. (from four plantings around Mallard Lake and two at the entrance of the Conservatory). Material of *C. jubata* came from Elk River, Humboldt Co. (cut-over land in the Redwood Forest, 8 km se. of Eureka); Redwood Road and Skyline Blvd., Oakland, Alameda Co. (serpentine soil); Oakland International Airport, Alameda Co. (filled land); Point Isabel, Contra Costa Co. (abandoned field); and Lucia, Monterey Co. (seacliff).

In *Cortaderia selloana,* amylase and leucine-aminopeptidase had only one band. The peroxidases, acid phosphatases, and esterases showed polymorphic systems. Values for the polymorphic index (PI) of Marshall and Allard (Heredity 25:373–382. 1970) suggest that variability in the first two systems is greatest in the material from Argentina (General Roca) and slightly less in the material from New Zealand. A slightly higher PI was obtained for New Zealand esterases than for Argentinian esterases. All of the Californian material showed less variation for these three systems. In particular, all the plants of the Golden Gate Park population proved to be virtually identical (one plant appeared to have an extra anodic band in the peroxidase system). This supports an early supposition that all these plants were derived from cuttings from a single plant (or very few plants) at the time of landscaping the area.

Enzyme activity, as judged by staining intensity, seemed comparable in all systems and populations with the exception of esterases in the material from Grizzly Island

Road. Here the marshland subpopulation indicated a much greater level of activity than the roadside subpopulation.

By contrast, the banding patterns in *Cortaderia jubata* for all enzymes were identical, not only in presence of bands but also in activity levels, even though habitats were diverse. Lack of electrophoretic variation here is correlated with apomixis. Our result agrees with that of Sternberg (Madroño 23:408–417. 1976), who found electrophoretic uniformity within ring-clones of *Larrea tridentata*.—MARTHA COSTAS-LIPPMANN and IRENE BAKER, Department of Botany, University of California, Berkeley 94720. (Received 30 Aug 1979; returned 11 Jan 1980; resubmitted 3 Apr 1980; accepted 9 Apr 1980; final version received 14 Apr 1980.)

BOOKS RECEIVED AND LITERATURE OF INTEREST

Diatoms of North America. By WILLIAM C. VINYARD. 120 p., illus. Mad River Press, Eureka, CA. 1979. ISBN 0-916-422-15-1. $5.25. Presents keys to and descriptions of the genera of freshwater and marine diatoms of the United States; illustrations of representative species; and discussions of ecology and distribution, cell wall structure, physiology, economics, and techniques for collection and preparation of both living and fossil forms.

Plants of Deep Canyon and the Central Coachella Valley, California. By JAN G. ZABRISKIE. 174 p., illus. Philip L. Boyd Deep Canyon Desert Research Center, Univ. California, Riverside. 1979. LCCN 79-63644. $14.95 (hardcover) or $8.95 (paper) plus tax and $1.00 for mailing. Will be reviewed in a subsequent issue.

California's Spanish Place-Names: What They Are and How They Got There. By BARBARA and RUDY MARINACCI. 267 p. Presidio Press, San Rafael, CA. 1980. ISBN 0-98141-102-X. $6.95 (paper) plus tax and shipping. Organized loosely historically, covering everything from abajeños to Pt. Zuniga. Delightful reading for those interested in the stories our place-names tell. Includes a useful 58-page dictionary-index.

Flora of Baja California. By IRA L. WIGGINS. 1025 p., illus. Stanford Univ. Press, Stanford, CA. 1980. ISBN 0-8047-1016-3. $65.00. A monumental work in preparation for 51 years. Will be reviewed in a subsequent issue.

Checklist of United States Trees (Native and Naturalized). By ELBERT L. LITTLE, JR. 375 p. U.S.D.A. Agriculture Handbook 541. 1979. USGPO stock number 001-000-03846-0. $10.00. The revised (from 1953) checklist compiles scientific names, synonyms, approved common names, and geographic ranges of U.S. trees (including Alaska but not Hawaii). Derivations of names, other common names, references, and other notes are included.

A Dictionary of Botany. By R. JOHN LITTLE and C. EUGENE JONES. 400 p. Van Nostrand Reinhold, New York. 1980. ISBN 0-442-24169-0. $18.50. If you have ever been puzzled by synaptinemal complexes, synemata, or the differences between syngameons and syngamodemes, this book offers an excellent place to begin reducing your confusion. Add succinct definitions of biological species and biosystematics and you have a book that will provide knowledge and enjoyment to botanists at all levels from introductory or amateur to research professionals. Highly recommended.

Flora Neotropica. Tremellales. By BERNARD LOWY. Monograph 6, 18 p. New York Botanical Garden, Bronx 10458. 1980. ISBN 0-89327-220-5. $4.50.

MEETING ANNOUNCEMENTS

16 October 1980: JEAN COLVIN, Program Director, University Research Expeditions Program, University of California, Berkeley. *UREP—Public Support and Involvement in University Field Research.* 8 p.m., 2003 Life Sciences Bldg., UCB.

20 November 1980: ROBERT RAABE, Department of Plant Pathology, University of California, Berkeley. *Some diseases of ornamental trees and approaches to control.* 8 p.m., 2003 LSB.

REVIEWS

Nevada through Rose Colored Glasses: The Fossil and Plant Collecting Percy Trains, 1928–1942. By AGNES SCOTT TRAIN. vii + 177 p., frontis. + 26 figs. Western Printing & Publishing Co., Box 601, Sparks, NV 89431. 1977. $6.50, paper.

This is a charming book about the collecting experiences of two adventurous and independent people, Percy Train and his wife, Agnes Scott Train, in Nevada and adjacent states from 1928 until Percy Train's death in 1942. Percy Train was a mining engineer who for many years made his living as an assayer. About 1915 he began collecting fossils which he sold to museums in North America and Europe, gaining in the process a considerable reputation as an excellent collector. In 1928 Train married Agnes Scott, a librarian from Chicago, and the two made collecting of fossils and later plants a joint venture.

A close association was formed with the late Professor Chester A. Arnold of the University of Michigan [see C. A. Arnold, Some Recollections of Percy Train (1876–1942). Huntia 2:111–116. 1965] in the collection of plant fossils. This led to collecting extant plants and the Train's association with the late Dr. W. A. Archer and the eventual publication by Percy Train, J. R. Hendricks, and Archer of the "Medical Uses of Plants by Indian Tribes of Nevada" (Contr. Fl. Nevada. 33. 1957).

This book describes vividly the experiences, trials, joys, often documented with amusing anecdotes, of a remarkable couple engaged in a unique profession in a far-from-hospitable land. For supplementary biographical information the reader is referred to Olga Reifschneider's account of the Trains (Biographies of Nevada Botanists. 1844–1963. Univ. Nevada Press. 1964).—JOHN H. THOMAS, Department of Biological Sciences, Stanford University, Stanford, CA 94305.

Oakes Ames: Jottings of a Harvard Botanist. 1874–1950. Edited by PAULINE AMES PLIMPTON. x + 403 p., frontis. + 41 illus. Botanical Museum of Harvard University, Cambridge, MA 02138. $12.95, cloth.

The definitive history of botany at Harvard University, and hence much of the history of botany in North America, has not yet been written, but books like the one under review will fill a part of the picture. Oakes Ames is best known for his systematic work in the Orchidaceae and his role in the development of economic botany. However, he is generally less well known for his very important position in the biological sciences at Harvard, especially from about 1925 through 1935, when he was chairman of the Division of Biology and of the Committee of Botanical Collections.

Ames was independently wealthy, perhaps giving him a more detached and objective view of biology than that of his many colleagues. Private funds allowed Ames to travel widely, hire personal research assistants, amass an excellent library and herbarium, and live in many ways the life of a "country squire". He was obviously devoted to his work and to his family. His wife, Blanche, was a gifted artist, particularly skilled in botanical illustration.

Most of this book comes from Ames' letters and diary, concentrating very heavily on his home and personal life. After reading it, I was left with the feeling that I wanted